

ABSTRACT

A method of wave diagnostics of oil-and-gas deposit for seismic survey on the basis of the complex of waves of the different types. It is performed by means of the insonification of the vicinity of the borehole by the seismic waves, the recording of the displacement vectors of the direct longitudinal and shear waves using the three-component seismic profiling in the investigated borehole, the data processing of the detailed profiling for the obtaining of the dynamical, rheological and absorbing parameters of the rock, and the geological interpretation of the above-mentioned parameters for the obtaining of the quantitative estimates of the reservoir and fluid-saturated properties of the rocks for each observation point lengthways depth of the borehole.